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PTO/SB/05 (01-04)  
Approved for use through 07/31/2006. OMB 0651-0032  
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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|                        |  |
|------------------------|--|
| Attorney Docket No.    | HAT.P1300A   |
| First Inventor         | Bonnie GURRY et al   |
| Title                  | A MICROSENSOR TO MEASURE OR REGULATE THE AMOUNT OF CHLORINE AND BROMINE IN WATER |
| Express Mail Label No. | EL722635954US  |

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 13]

(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed Sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4.  Drawing(s) (35 U.S.C. 113) [Total Sheets 3]

5. Oath or Declaration [Total Sheets 6]

- a.  Newly executed (original or copy)

- b.  Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)

i.  **DELETION OF INVENTOR(S)**

Signed statement attached deleting inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).

6.  Application Data Sheet. See 37 CFR 1.76

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)

- a.  Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i.  CD-ROM or CD-R (2 copies); or
  - ii.  paper
- c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 CFR 3.73(b) Statement (when there is an assignee)  Power of Attorney
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  0 Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other: Check in the amount of \$385.00.. ....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

Continuation  Divisional  Continuation-in-part (CIP) of prior application No.: ...09/799,969....

Prior application information: Examiner A. Noguerola Art Unit: 1753  
For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

|  |   |           |   |
|--|---|-----------|---|
| <input checked="" type="checkbox"/> Customer Number: | 23575   | OR        | <input type="checkbox"/> Correspondence address below |
| Name   | Renner, Kenner, Greive, Bobak, Taylor & Weber |           |   |
| Address  | 24500 Center Ridge Road                       |           |   |
| City   | Suite 280                                     | State     | OH  |
| Country  | Westlake                                      | Telephone | 440/808-0011  |
| Zip Code   | 44145   |           |   |
| Fax  | 440/808-0657                                  |           |   |

|                   |                    |                                   |       |
|-------------------|--------------------|-----------------------------------|-------|
| Name (Print/type) | Joseph G. Curatolo | Registration No. (Attorney/Agent) | 28837 |
| Signature         | Joseph G. Curatolo |                                   |       |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant Claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 385.00)

## Complete if Known

|                      |                    |
|----------------------|--------------------|
| Application Number   | New Application    |
| Filing Date          | February 23, 2004  |
| First Named Inventor | Bonnie GURRY et al |
| Examiner Name        | n/a                |
| Art Unit             | n/a                |
| Attorney Docket No.  | HAT.P1300A         |

## METHOD OF PAYMENT (check all that apply)

 Check  Credit card  Money Order  Other  None Deposit Account

|                        |   |
|------------------------|---|
| Deposit Account Number | 18-0987                                       |
| Deposit Account Name   | Renner, Kenner, Greive, Bobak, Taylor & Weber |

The Director is authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee

to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

| Large Entity  | Small Entity  | Fee Description        | Fee Paid |
|---------------|---------------|------------------------|----------|
| Fee Code (\$) | Fee Code (\$) |                        |          |
| 1001 770      | 2001 385      | Utility filing fee     | 385.00   |
| 1002 340      | 2002 170      | Design filing fee      |          |
| 1003 530      | 2003 265      | Plant filing fee       |          |
| 1004 770      | 2004 385      | Reissue filing fee     |          |
| 1005 160      | 2005 80       | Provisional filing fee |          |

SUBTOTAL (1) (\$ 000.00)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

|                    |   |        |   |   |   |   |              |                |          |
|--------------------|---|--------|---|---|---|---|--------------|----------------|----------|
| Total Claims       | 7 | -20**= | 0 | X | = | 0 | Extra Claims | Fee from below | Fee Paid |
| Independent Claims | 1 | - 3**= | 0 | X | = | 0 |              |                |          |
| Multiple Dependent |   |        |   |   |   |   |              |                |          |

| Large Entity  | Small Entity  | Fee Description   |
|---------------|---------------|---|
| Fee Code (\$) | Fee Code (\$) |   |
| 1202 18       | 2202 9        | Claims in excess of 20                                    |
| 1201 86       | 2201 43       | Independent claims in excess of 3                         |
| 1203 290      | 2203 145      | Multiple dependent claim, if not paid                     |
| 1204 86       | 2204 43       | **Reissue independent claims over original patent         |
| 1205 18       | 2205 9        | **Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$0)

\*\* or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

## Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description  | Fee Paid |
|---------------|---------------|--|----------|
| 1051 130      | 2051 65       | Surcharge - late filing fee or oath  |          |
| 1052 50       | 2052 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053 130      | 1053 130      | Non-English specification  |          |
| 1812 2,520    | 1812 2,520    | For filing a request for ex parte reexamination                            |          |
| 1804 920*     | 1804 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805 1,840*   | 1805 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251 110      | 2251 55       | Extension for reply within first month                                     |          |
| 1252 420      | 2252 210      | Extension for reply within second month                                    |          |
| 1253 950      | 2253 475      | Extension for reply within third month                                     |          |
| 1254 1,480    | 2254 740      | Extension for reply within fourth month                                    |          |
| 1255 2,010    | 2255 1,005    | Extension for reply within fifth month                                     |          |
| 1401 330      | 2401 165      | Notice of Appeal   |          |
| 1402 330      | 2402 165      | Filing a brief in support of an appeal                                     |          |
| 1403 290      | 2403 145      | Request for oral hearing   |          |
| 1451 1,510    | 1451 1,510    | Petition to institute a public use proceeding                              |          |
| 1452 110      | 2452 55       | Petition to revive - unavoidable   |          |
| 1453 1,330    | 2453 665      | Petition to revive - unintentional   |          |
| 1501 1,330    | 2501 665      | Utility issue fee (or reissue)   |          |
| 1502 480      | 2502 240      | Design issue fee   |          |
| 1503 640      | 2503 320      | Plant issue fee  |          |
| 1460 130      | 1460 130      | Petitions to the Commissioner  |          |
| 1807 50       | 1807 50       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806 180      | 1806 180      | Submission of Information Disclosure Stmt                                  |          |
| 8021 40       | 8021 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809 770      | 2809 385      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810 770      | 2810 385      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801 770      | 2801 385      | Request for Continued Examination (RCE)                                    |          |
| 1802 900      | 1802 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

Complete (if applicable)

## SUBMITTED BY

|                   |                           |                                   |       |           |              |
|-------------------|---------------------------|-----------------------------------|-------|-----------|--------------|
| Name (Print/Type) | Joseph G. Curatolo        | Registration No. (Attorney/Agent) | 28837 | Telephone | 440/808-0011 |
| Signature         | <i>Joseph G. Curatolo</i> |                                   | Date  | 2-23-2004 |              |

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WESLEY C. MEINERDING

SYLVIA PETROSKY, of counsel

Patent Agent  
TAMA L. DRENISKI

February 23, 2004  
Docket No. HAT.P1300A

**MAIL STOP PATENT APPLICATION  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450**

Sir:

Transmitted herewith for filing under 35 U.S.C. §111(a) is the following written application for a patent.

Express Mail No.: EL722635954US

Inventor(s): Bonnie GURRY, Meijun SHAO, Laurie DUDIK, and Chung-Chiun LIU

Title: A MICROSENSOR TO MEASURE OR REGULATE THE AMOUNT OF  
CHLORINE AND BROMINE IN WATER

Assignee: Hathaway Brown School  
19600 North Park Blvd.  
Shaker Heights, OH 44122

This Application is a division of US Patent Application 09/799,969 filed on March 6, 2001 which claims priority from US Provisional Application 60/187,528 filed on March 7, 2000.

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#### **Certificate of Express Mailing**

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John R Barnes  
(type or print name of person signing paper)

John Barnes  
(signature of person mailing paper)

2/23/2004  
(date)

Offices in

AKRON

CLEVELAND/WESTLAKE

RENNER KENNER GREIVE BOBAK TAYLOR & WEBER

Enclosed:

Transmittal Letter with Certificate of Mailing and Authorization to Charge Deposit Account (2 pages-in duplicate)

Utility Patent Application Transmittal (1 page)

Fee Transmittal (1 page-in duplicate)

Print EFS Application Data Sheet (2 pages)

Written Assertion of Small Entity Status of Applicant (2 pages)

Copy of Combined Declaration/Power of Attorney

filed in prior copending application (6 pages)

Specification

10 Pages of Description

2 Pages of Claims

1 Page of Abstract

3 Drawing Sheets

Information Disclosure Statement (3 pages)

Information Disclosure Statement by Applicant Forms PTO/SB08A & 08B (2 pages)

Request For Nonpublication and Certification (1 page)

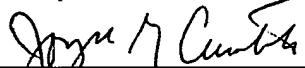
Check in the Amount of \$385.00

Return Receipt Postcard

Authorization to Charge Deposit Account

In the event a fee is applicable to the filing of these documents and the required fee is not enclosed, or the fee submitted is insufficient, the Commissioner is hereby authorized to charge any fees which might be required to effect the filing of this (these) document(s) for HAT.P1300A to Account No. 18-0987. This authorization is being submitted in duplicate.

Respectfully submitted,

  
\_\_\_\_\_  
Joseph G. Curatolo (Reg. No. 28,837)  
RENNER, KENNER, GREIVE, BOBAK, TAYLOR & WEBER  
24500 Center Ridge Road, Suite 280  
Westlake, Ohio 44145  
Telephone: (440) 808-0011  
Attorney for Applicants

2-23-2004  
Date

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**NONPUBLICATION REQUEST  
UNDER  
35 U.S.C. 122(b)(2)(B)(i)**

|                        |  |                    |
|------------------------|--|--------------------|
| First Named Inventor   |  | Bonnie GURRY et al |
| Title                  | A MICROSENSOR TO MEASURE OR REGULATE THE AMOUNT OF CHLORINE AND BROMINE IN WATER |                    |
| Attorney Docket Number |  | HAT.P1300A         |

I hereby certify that the invention disclosed in the attached application **has not and will not be** the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

I hereby request that the attached application not be published under 35 U.S.C. 122(b).

2-23-2004

Date

Signature

440/808-0011

Telephone number

Joseph G. Curatolo

Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application **upon filing**.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant **must** notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. **Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).**

This collection of information is required by 37 CFR 1.213(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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